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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/644,965 | 08/21/2003 | Issaku Sato | 1050/HIROSE | 7583 |

27649 7590 06/14/2005

MICHAEL TOBIAS

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1717 K ST. NW, SUITE 613
WASHINGTON, DC 20036

EXAMINER

SAVAGE, JASON L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1775

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,965

Applicant(s)

SATO ET AL

Examiner

Jason L. Savage

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-11 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08212003, 12222003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato'033 (US 6,492,033) in view of either Kato'102 (JP 55-134102) or Kato'103 (JP 55-134103)

Sato'033 teaches a multi-layer copper based bearing metal layer which is bonded to a metal steel backing by sintering of the composite bearing material wherein the bearing metal layer comprises a mixture of copper alloy including 7-13 % Sn and further includes solid lubricant powders such as graphite and molybdenum disulfide in amounts up to 2% and 0.5% respectively (col. 3, ln. 36-60).

Sato'033 is silent to the solid lubricant's being plated with a copper; however, it is known in the art to coat solid lubricants with metal platings such as copper for use in copper bearing materials. As evidence of this Kato'102 and Kato'103 are provided.

Kato'102 teaches a copper based bearing comprising a mixture of copper alloys containing tin and further containing copper coated solid lubricants (abstract).

Kato'103 teaches a copper based bearing comprising a mixture of copper alloys which may contain tin and further containing copper coated solid lubricants such as graphite (abstract).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to have included copper coated lubricants in the composite powdered bearing material of Sato'033 since coated lubricants are known to be suitable for use in such composite bearing materials.

Regarding claim 4, the references are silent to sintering the mixed powder of copper alloy and copper plated solid lubricants to form a sintered mass and subsequently pulverizing said sintered mass to form powder which is then dispersed onto the backing plate. However, the claims are drawn to an article, not the method of making. Absent a teaching of the criticality of how the product having the pulverized powders claimed by Applicant would materially differ from the product of the prior art, it would not provide a patentable distinction over the prior art. When there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324.

The Patent and Trademark Office can require Applicant to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on Applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products

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evidences fairness of this rejection, In re Best, Bolton, and Shaw, 195 U.S.P.Q. 431 (CCPA 1977).

Prior Art Made of Record but not Relied Upon

The following is a listing of prior art made of record but not relied upon:

Kanezaki (JP 05-209207) teaches a multi-layer copper based bearing formed by mixing copper alloy powder and copper coated lumpy graphite which is subjected to sintering wherein the coated graphite is uniformly dispersed in the sintered composite bearing alloy (abstract).

Sato'453 (US 6,613,453) teaches the method of forming said multi-layer sliding parts comprising the steps of mixing powder materials comprising copper alloys and solid lubricants to form the composite powder, dispersing the composite powder onto a steel backing, sintering the powders in a reducing atmosphere, pressing the sintered layer to densify the bearing, annealing the formed material and finally subjecting the thus formed sliding part to another pressing step (col. 2, ln. 17 – col. 3, ln. 17).

Allowable Subject Matter

Claims 7-11 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art teaches multi-layer sliding parts comprising bearing materials made from composite powder mixtures of copper tin alloys and copper plated solid lubricants which are bonded to a metal backing by sintering. The prior art such as Sato'453 (US

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6,613,453) teaches the method of forming said multi-layer sliding parts comprising the steps of mixing powder materials comprising copper alloys and solid lubricants to form the composite powder, dispersing the composite powder onto a steel backing, sintering the powders in a reducing atmosphere, pressing the sintered layer to densify the bearing, annealing the formed material and finally subjecting the thus formed sliding part to another pressing step (col. 2, ln. 17 – col. 3, ln. 17).

However, the prior art does not teach or suggest mixing copper alloy powder with copper plated solid lubricants to form a sintered mass, subsequently pulverizing said sintered mass to form a composite powder and thereafter disposing the pulverized composite powder onto to backing to be sintered and pressed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Savage whose telephone number is 571-272-1542. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jason Savage
6-9-05


DEBORAH JONES
SUPERVISORY PATENT EXAMINER